



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,753	09/23/2003	James L. McArdle	58717US002	1787

32692 7590 09/24/2004

3M INNOVATIVE PROPERTIES COMPANY
PO BOX 33427
ST. PAUL, MN 55133-3427

EXAMINER

MARCHESCHI, MICHAEL A

ART UNIT	PAPER NUMBER
----------	--------------

1755

DATE MAILED: 09/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/668,753

Applicant(s)

MCARDLE ET AL.

Examiner

Michael A Marcheschi

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/12/04
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 and 31-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 and 31-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/10/04
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 8, 23-29 and 31-32 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

PREVIOUS INDEFINITE REJECTIONS:

Claim 9 is indefinite as to the phrase “parabolic function includes a square root function” because the examiner is unclear as to what this claim is defining, thus rendering the scope of the claim unclear. What is meant by a parabolic function and a square root function and how do these define the composites?

Claim 23 is indefinite as to the phrase “removing the slurry from the production tool” (step (e)) because once the binder precursor (in the slurry) is cured, as defined by step (d), it will not longer be a slurry, but a cured form thereof. Step (e) should be rewritten in a more clear manner.

Claim 24 is indefinite as to the phrase “before the step of removing the slurry from the production tool” (step (e) of claim 23) because once the binder precursor (in the slurry) is cured, it will not longer be a slurry, but a cured form thereof. This claim should be rewritten in a more clear manner.

NEW INDEFINITE REJECTIONS:

Claims 23-24 are indefinite as to the phrases “to form a cured binder” and “the cured binder” (steps e and f) because the claims do not state that abrasive particles are present (in the

Art Unit: 1755

cured binder), as is required by step (a) of claim 23. This should be “binder/abrasive particle composites?

Claim 24 is also indefinite as to the phrase “thus resulting in removing the cured binder from the production tool” because this phrase, when appended to claim, renders the scope of the claim unclear (this phrase does not defined the claimed invention in a clear and concise manner and thus should be canceled)

Claim 25 is indefinite as to the phrase “the current binder” because the examiner is unclear as to what this is. In addition, since a binder does not include abrasive particles, the claim, when this phrase is used, does not clearly define that the binder/abrasive particle slurry is removed. This phrase should be canceled.

Claim 25 is also indefinite as to the phrase “thus resulting in removing the slurry from the production tool” because this phrase, when appended to claim, renders the scope of the claim unclear (this phrase does not defined the claimed invention in a clear and concise manner and thus should be canceled)

The other claims are indefinite because they depend on indefinite claims.

Claims 1-29 and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoopman et al. (248) in view of Abrahamson for the same reasons set forth in the previous office action which are incorporated herein by reference.

Claims 1-29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoopman et al. (217) in view of Abrahamson for the same reasons set forth in the previous office action which are incorporated herein by reference.

Applicant's arguments filed 7/12/04 have been fully considered but they are not persuasive.

Applicants argue that the two Hoopman et al. references do not teach the claimed invention in view of the unexpected results obtained in the examples (i.e. recognize the benefits of the claimed combination of abrasive size and composite height (topography)). Although the benefits might not be defined, this does not establish patentability for the claimed invention in the absence of criticality for the claimed combination abrasive sizes and composite heights (topography). The examiner acknowledges the examples of the instant invention but these examples are compared to an abrasive article, wherein **no** composite heights (topography) are defined. At most, the examples might show criticality for the claimed combination of abrasive sizes and composite heights (topography) when compared to articles that **do not define any composite height**. Since both references teach literal composite height in combination with literal abrasive particles sizes, applicants evidence is not convincing because said evidence does not compare the claimed combination to combination of sizes and heights that are outside the claimed ranges (i.e. the comparative examples do not define any composite height, thus the examiner is unclear as to how they can be used to establish criticality when the references specifically teach composite heights. In other words, applicants have not compared the claimed invention to the abrasive articles of the references applied. **The references teach all of the claimed components and abrasive sizes and composite heights which encompass the claimed values and no comparison of these values with the claimed values has been provided, therefore no distinction is seen to exist.** With respect to the shape, the primary

Art Unit: 1755

references state that the composites can be any shape, thus making the claimed limitation of a parabolic shape obvious.

In all the rejections above, the desired particle size is a function of the application and mere recitation of that size does not represent a patentable distinction over these references to one of ordinary skill in the art, lacking evidence to the contrary.

With respect to the indefinite rejections, applicants argue that claim 9 is definite in view of figure 2 and the discussion at page 10, lines 8-16. The examiner fails to see how the above defines what is meant by the claimed language. With respect to the indefinite rejection of claims 23-24, applicants do not argue these rejections.

In view of the teachings as set forth above, it is still the examiners position that the references reasonably teach or suggest the limitations of the rejected claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

"A reference is good not only for what it teaches but also for what one of ordinary skill might reasonably infer from the teachings. *In re Opprecht* 12 USPQ 2d 1235, 1236 (CAFC 1989); *In re Bode* USPQ 12; *In re Lamberti* 192 USPQ 278; *In re Bozek* 163 USPQ 545, 549 (CCPA 1969); *In re Van Mater* 144 USPQ 421; *In re Jacoby* 135 USPQ 317; *In re LeGrice* 133 USPQ 365; *In re Preda* 159 USPQ 342 (CCPA 1968)". In addition, "A reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments" See *In re Van Marter*, 144 USPQ 421.

"A generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)".

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549; *In re Wertheim* 191 USPQ 90 (CCPA 1976)".

The change in sequence of adding ingredients would have been obvious to one of ordinary skill in the art absent evidence to the contrary. *In re Gibson* 5 USPQ 230.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

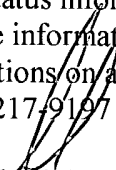
Art Unit: 1755

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L Bell can be reached on (571) 272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

9/04

MM


Michael A Marcheschi
Primary Examiner
Art Unit 1755